

Appl. No. 10/735,946  
Response dated August 6, 2007  
Reply to Office Action of 2/6/2007

**REMARKS/ARGUMENTS**

Applicant respectfully request reconsideration of this application in view of the following remarks.

The Office withdrew claims 29-38, 42, and 43 from being indicated as allowable and a new rejection was made, wherein the Office stated:

"Claims 29-38, 42, and 43 have been withdrawn from being indicated as allowable and a new rejection made. This rejection is being reinstated because the reference has been re-interpreted and it has been determined that moving the drill mast from a horizontal to a vertical position can be read as removing the mast from the ATV and the drill mast brackets can be considered a drill mast stand."

Office Action, Feb. 06, 2007, page 2, ¶1.

"The examiner contends the mast is considered 'removed' from the stored position to the upright position, via support bearing 16, as opposed to, say, - detached then placed in the drilling position- from the ATV."

Office Action, Feb. 06, 2007, page 7, ¶1.

Respectfully, Applicant points out that the meaning ascribed to the word "removed" by the Office is not consistent with Applicant's specification and teaching therein.

Applicant's use of the word "removed" can be seen in Applicant's Figures 14A, 14B, and 14C. However, Applicant amends "remove" to "detach" in independent claim 29 to avoid the meaning the Office ascribed to "remove." As such, Applicant contends that all pending claims, i.e., 15-21, 29-35, 37, 38, 42, and 43 are in condition for allowance and requests that the Office issue a timely notice of allowance.

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**Response to Rejection of Claims 19, 20, 29-32, 37, 42, and 43 under 35 U.S.C. § 103(a)**

**– Gallagher in view of Brazell, II**

The Office has rejected claims 19, 20, 29-32, 37, 42, and 43 under 35 U.S.C. 103(a) as being unpatentable over Gallagher (5,363,925) in view of Brazell, II (4,938,296), and states on page 2:

"Gallagher discloses an all terrain vehicle (ATV) 10; drill mast 14 removably coupled, via bearing 16, to the ATV; a hydraulic drill motor 24 configured to turn a drill bit (end of auger 26); the drill motor slidingly disposed on the drill mast 14; a manual control 64 configured to operate the drill motor; a hydraulic pump 62; the drill mast configured to rotate about one or two axes relative to the ATV (col. 3, lines 52-56); and a solid stem auger for coring but not a power takeoff configured to deliver power from an ATV engine; the drill motor powered from the power takeoff; the hydraulic pump operated by the power takeoff and the drill motor powered from the power takeoff.

Brazell, II presents a power takeoff delivering power from an ATV engine, the drill motor powered from the power takeoff (p.t.o.), the hydraulic pump operated by the power takeoff, and the drill motor powered from the power takeoff for a drilling rig (col. 3, lines 57-61).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to power the Gallagher drill motor with an engine p.t.o. as presented by Brazell, II and noting the Brazell, II suggestion (col. 3, lines 2-3) "...capable of being supported by a relatively small vehicle." The mast is not formed as a single piece with the ATV and thus can be removed. Also, "when the drill mast is removed from the ATV to facilitate drilling" can be interpreted as the drill mast 14 being removed from a position in Fig. 1 to a position in Fig. 2, which basically removes the drill mast from the ATV to a vertical drilling position. The "drill mast stand" can be interpreted as the drill

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mast support including brackets 46, 48, etc. shown in Fig.2 and columns 3 and 4, which is configured to receive the drill mast 14."

Applicant respectfully points out that according to the MPEP §2142, "to establish a *prima facie* case of obviousness, three basic criteria must be met

- 1<sup>st</sup> there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings;
- 2<sup>nd</sup> there must be a reasonable expectation of success; and
- 3<sup>rd</sup> the prior art reference (or references when combined) must teach or suggest all of the claim limitations."

These criteria have not been met by the Office's rejection of Applicant's claims 19, 20, 29-32, 37, 42, and 43.

Respectfully, Applicant disagrees with the Office's contention that it would "have been obvious to a person having ordinary skill in the art at the time the invention was made to power the Gallagher drill motor with an engine p.t.o., as presented by Brazell, II and noting the Brazell, II **suggestion** (col. 3, lines 2-3) "...capable of being supported by a relatively small vehicle." Office Action Feb. 6, 2007, page 3, ¶3 (emphasis added). The "suggestion" does not suggest Applicant's all terrain vehicle (ATV).

Brazell, II's use of the term "lightweight" and "relatively small vehicle" needs to be understood within the context of Brazell, II's "large" vehicles, such as those from Acker Company of Scranton Pa. See Brazell, II, col. 1, lines 12 – col. 2, lines 18. The so called "relatively small vehicle" of Brazell, II is what is commonly known as a truck, see Brazell, II figures 1, 2, and 6, see for example: "numeral 10 denotes generally a conventional truck 10 having a cab 11 and flat bed 12. Drilling apparatus 9 is shown mounted onto flat bed 12 of

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truck 10." Brazell, II, col. 4, lines 30-32. Brazell, II does not teach nor suggest Applicant's ATV, because what is "commonly known as a truck" is not Applicant's ATV. There is no suggestion within Brazell, II of a vehicle such as Applicant's ATV. Therefore, the combination of Gallagher in view of Brazell, II does not render obvious Applicant's claim 29 nor the claims that depend therefrom (i.e., 15-21, 30-35, 37-38, 42-43) because the references both singly and in combination fail to teach all of Applicant's claim limitations.

Respectfully, Gallagher's support brackets 46, 48, etc. as shown in FIG. 2 and FIG. 4 are not equivalent to Applicant's "drill mast stand" as illustrated in Applicant's Figures 14A, 14B, and 14C, due to the fact that Gallagher's support brackets 46, 48 are connected to Gallagher's vehicle 10, see for example:

"Secured on a reinforced rear luggage rack of the vehicle 10 is a platform or plate 12. A drill beam 14 is connected to the plate 12 by way of a supporting bearing 16. The supporting bearing 16 permits the beam 14 to be rotated from a vertical drilling position to a horizontal position."

Gallagher, col. 2, lines 52-56.

Therefore, Gallagher's support brackets have the limitation of being "secured" onto Gallagher's vehicle, Applicant's "drill mast stand" does not have such limitations.

Therefore, the combination of Gallagher in view of Brazell, II does not render obvious Applicant's claim 29 nor the claims that depend therefrom (i.e., 15-21, 30-35, 37-38, 42-43) because the references both singly and in combination fail to teach all of Applicant's claim limitations.

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With respect to Applicant's claims 20 and 43, Applicant teaches "wherein the drill mast is configured to rotate about two axes..." The text from Gallagher, cited by the Office, i.e., "the drill mast configured to rotate about one or two axes relative to the ATV (col. 3, lines 52-56)" does not teach rotation about two axes. Gallagher describes an apparatus consisting of one bearing that permits rotation about one axis only, i.e., "[t]he support bearing 16 permits the beam 14 to be rotated from a vertical drilling position to a horizontal position." Gallagher, col. 2, lines 55-57. Therefore, the combination of Gallagher in view of Brazell, II does not render Applicant's claims 20 or 43 obvious because the references both singly and in combination fail to teach all of Applicant's claim limitations.

**Response to Rejection of Claims 15 and 21 under 35 U.S.C. § 103(a) – Gallagher in view of Brazell, II as applied to claim 29 above and further in view of Moseley**

The Office has rejected claims 15 and 21 under 35 U.S.C. 103(a) as being unpatentable over Gallagher in view of Brazell, II as applied to claim 29 above, and further in view of Moseley (5,248,001), and states on pages 3-4:

"The combination discloses an ATV p.t.o powering a drill but not a sheave rotatably configured on the drill mast; a motor coupled with the sheave; an impact hammer raised by a flexible cord directed by the drill mast and received onto the sheave or the drill mast articulating in a ball and socket.

Moseley shows a sheave 24 rotatably configured on a drill mast 11; a motor 60 coupled with the sheave and driven by the p.t.o. (col. 5, line 26); an impact hammer 28 raised by a flexible cord 45, wherein the flexible cord is directed

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by the drill mast and is received onto the sheave; and the drill mast articulating in a ball and socket 129.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute the combination sampling device with the Moseley sampling device as indicated by applicant 'Many different types of drilling...' [0059]."

Office Action, Feb. 06, 2007, page 3, ¶4 – page 4, ¶3.

Applicant respectfully points out that according to the MPEP §2142, "to establish a *prima facie* case of obviousness, three basic criteria must be met

- 1<sup>st</sup> there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings;
- 2<sup>nd</sup> there must be a reasonable expectation of success; and
- 3<sup>rd</sup> the prior art reference (or references when combined) must teach or suggest all of the claim limitations."

These criteria have not been met by the Office's rejection of Applicant's claim 29, as noted above, from which both claims 15 and 21 depend. Therefore, the combination of Gallagher in view of Brazell, II in further view of Moseley does not render Applicant's claims 15 and 21 obvious.

With respect to Moseley and Applicant's claim 21, Moseley does not teach "the drill mast articulating in a ball and socket 129" as the Office contends. Moseley's steel post driving machine 13 is mounted on the lift mechanism of a tractor 10. See Moseley, Abstract, and col. 3, lines 54-60. Moseley teaches that the machine 13 includes an upright mast 11, which "has a pair of spaced-apart legs 22 made of angle iron or the like, the lower

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ends of which are provided with enlarged feet 23 that are slidably mounted in elongated guides 25 which are bolted or otherwise secured to the base plate 19." Moseley, col. 4, lines 27-32. Thus, Moseley's mast 11 is bolted to base plate 19. Id. Moseley does not teach Applicant's claim 21, i.e., "wherein the drill mast is configured to articulate in a ball and socket." Therefore, the combination of Gallagher in view of Brazell, II in further view of Moseley does not render Applicant's claim 21 obvious.

**Response to Rejection of Claims 16-18 under 35 U.S.C. § 103(a) – Gallagher in view of Brazell, II and Moseley as applied to claims 15 and 29 respectively above and further in view of Henson**

The Office has rejected claims 16-18 under 35 U.S.C. 103(a) a) as being unpatentable over Gallagher in view of Brazell, II and Moseley as applied to claims 15 and 29, respectively, above, and further in view of Henson (4,081,040). Claims 16-18 depend from independent claim 29. For the reasons stated above, Gallagher and Brazell, II do not render claim 29 obvious, therefore neither does the combination of Gallagher, Brazell, II, Moseley, and Henson render claims 16-18 obvious.

**Response to Rejection of Claims 33-35 under 35 U.S.C. § 103(a) – Gallagher in view of Brazell, II as applied to claim 29 above, and further in view of Rust et al.**

The Office has rejected claims 33-35 under 35 U.S.C. 103(a) a) as being unpatentable over Gallagher in view of Brazell, II as applied to claim 29 above, and further in view of Rust et al. Claims 33-35 depend from independent claim 29. For the reasons

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stated above, Gallagher and Brazell, II do not render claim 29 obvious, therefore neither does the combination of Gallagher, Brazell, II, Moseley, and Rust et al. render claims 33-35 obvious.

**Response to Rejection of Claim 38 under 35 U.S.C. § 103(a) – Gallagher in view of  
Brazell, II as applied to claim 29 above, and further in view of Davis**

The Office has rejected claim 38 under 35 U.S.C. 103(a) a) as being unpatentable over Gallagher in view of Brazell, II as applied to claim 29 above, and further in view of Davis (3,794,127). For the reasons stated above, Gallagher and Brazell, II do not render claim 29 obvious, therefore neither does the combination of Gallagher, Brazell, II, Moseley, and Davis render claim 38 obvious.

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### CONCLUSION

Claim 29 has been amended and Applicant contends that all pending claims are in condition for allowance.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. The Examiner is invited to telephone the undersigned at 206-447-1336 to further the prosecution of this case if necessary.

Communication via cleartext email is authorized.

Respectfully submitted,

PELOQUIN, PLLC

August 6, 2007  
Date

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USPTO Registration # 50,787

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### CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being transmitted herewith via facsimile transmission to Telephone No. (571) 273-8300 on the date indicated below and is addressed to: Mail Stop AMENDMENT, Commissioner for Patents, Box 1450, Alexandria, Virginia 22313-1450.

Date of Deposit: August 6, 2007

Mark S. Peloquin, Esq.  
(Typed or printed name of person transmitting paper or fee)

*Mark S. Peloquin, Esq.* August 6, 2007  
(Signature of person transmitting paper or fee) Date